

WHAT IS CLAIMED IS:

1. A printed wiring board design aiding system comprising:

means for acquiring design layout information  
5 regarding a printed wiring board targeted for design;  
means for acquiring setting parameter information  
for the printed wiring board, which is targeted for  
design; and

means for estimating a value of the thickness of  
10 each of insulation layers of the printed wiring board  
in a post-manufacture state in accordance with the  
information acquired by the means for acquiring design  
layout information and the information acquired by the  
means for acquiring setting parameter information, and  
15 for outputting an estimated value.

2. The printed wiring board design aiding system  
according to claim 1, further comprising means for . . .  
performing feedback of information of a plate thickness  
or the thickness of each of the insulation layers,  
20 which have been estimated by the means for estimating  
a value of the thickness of each of insulation layers,  
to a simulator, the simulator performing transmission  
line simulation of the printed wiring board CAD  
processor.

25 3. The printed wiring board design aiding system  
according to claim 1, wherein the design layout  
information acquired by the means for acquiring design

layout information includes one of design information for a pattern, design information for a through-hole, design information for a non-through-hole, design information for a via, and design information for the shape of the printed wiring board.

4. The printed wiring board design aiding system according to claim 1, wherein the setting parameter information acquired by the means for acquiring setting parameter information include a parameter of at least one of the thickness of the pattern, the thickness of an insulation material, a resin content of a prepreg, the viscosity of the prepreg, a resin flow amount of the prepreg, a stack time, a stack temperature, and a stack pressure.

5. A printed wiring board CAD system comprising:  
a printed wiring board CAD processor;  
a transmission line simulator; and  
a printed wiring board design aiding module which acquires information of a pattern of a printed wiring board to be designed and information of individual parameters of the thickness of the pattern, the thickness of an insulation material, a resin content of a prepreg, the viscosity of the prepreg, a resin flow amount of the prepreg, and stack conditions as the setting parameters from the printed wiring board CAD processor; and estimates either a value of a plate thickness of the printed wiring board or a value of

the thickness of each of the insulation layers in accordance with the individual information; and feeds back an estimated value to the transmission line simulator.

5           6. A record medium having stored thereon a computer readable program for enabling a computer for causing a printed wiring board CAD processor to aid a printed wiring board design, said program comprising:

          first code means for acquiring design layout  
10 information regarding a printed wiring board targeted for design from the printed wiring board CAD processor;

          second code means for acquiring setting parameter information for the printed wiring board targeted for design;

15           third code means for estimating a value of the thickness of each of insulation layers of the printed wiring board in a post-manufacture state in accordance with the information acquired by the first code means and the information acquired by the second code means  
20 and which outputs an estimated value.

          7. The record medium according to claim 6, said program further comprising fourth code means for performing feedback of information of the value estimated by the third code means to a simulator which  
25 performs transmission line simulation of the printed wiring board CAD processor.

          8. The record medium according to claim 7,

wherein the setting parameter information acquired by the second code means include a parameter of at least one of the thickness of the pattern, the thickness of an insulation material, a resin content of a prepreg, the viscosity of the prepreg, a resin flow amount of the prepreg, a stack time, a stack temperature, and a stack pressure.

9. The record medium according to claim 6, wherein the design layout information acquired by the first code means includes at least one of design information for a pattern, design information for a through-hole, design information for a non-through-hole, design information for a via, and design information for the shape of the printed wiring board.

10. The record medium according to claim 6, wherein the setting parameter information acquired by the second code means include a parameter of one of the thickness of the pattern, the thickness of an insulation material, a resin content of a prepreg, the viscosity of the prepreg, a resin flow amount of the prepreg, a stack time, a stack temperature, and a stack pressure.

11. The record medium according to claim 6, wherein the third code means estimates a permittivity of each of layers and a dielectric loss tangent thereof in accordance with the information of the estimated thickness of each of the insulation layers and

prescribed information acquired by the first and second  
code means.